

STATE OF MINNESOTA

DISTRICT COURT

COUNTY OF RAMSEY

SECOND JUDICIAL DISTRICT

CASE TYPE: OTHER CIVIL

Court File No. C1-94-8565

The State of Minnesota,
By Hubert H. Humphrey, III,
Its Attorney General

and

Blue Cross and Blue Shield of Minnesota,

Plaintiffs,

vs.

**REPORT OF SPECIAL MASTER:
FINDINGS OF FACT, CONCLUSIONS
OF LAW AND RECOMMENDATIONS**

Philip Morris Incorporated,
R.J. Reynolds Tobacco Company,
Brown & Williamson Tobacco Corporation,
B.A.T. Industries, p.l.c.,
British-American Tobacco Company Limited,
BAT (U.K. & Export) Limited,
Lorillard Tobacco Company,
The American Tobacco Company,
Liggett Group, Inc.,
The Council for Tobacco Research - U.S.A., Inc.
and The Tobacco Institute, Inc.,

Defendants.

Hearings on the above-named matter took place on July 16, 1997 through July 18, 1997, before Special Master Mark W. Gehan. Roberta Walburn, Esq., appeared and argued on behalf of Plaintiffs. Noel Clinard, Esq., William Allinder, Esq., David Bernick, Esq., William Plesec, Esq., Thomas Reynolds, Esq., James Goold, Esq. and Leslie Wharton, Esq., appeared and argued on behalf of all Defendants with the exception of Liggett Group, Inc. The following also were present at one or all of the hearing dates and identified themselves as appearing on behalf of the party or parties set forth opposite their names:

<u>Name</u>	<u>Party</u>
Gary Wilson	State of Minnesota and Blue Cross and Blue Shield of Minnesota
Tara Sutton	State of Minnesota and Blue Cross and Blue Shield of Minnesota
David Klatasake	State of Minnesota
Anne McBride Walker	Philip Morris Incorporated
Peter Sipkins	Philip Morris Incorporated
Paul Dieseth	Philip Morris Incorporated
Cheryl Grissom Ragsdale	Philip Morris Incorporated
Jonathan Redgrave	R.J. Reynolds Tobacco Company
Ram Padmanabhan	Brown & Williamson Tobacco Corporation
Michael Lieber	Brown & Williamson Tobacco Corporation
Gerald Svoboda	B.A.T. Industries, p.l.c.
Jeffrey Nelson	Lorillard Tobacco Company
Craig Proctor	Lorillard Tobacco Company
Denise Talbert	Lorillard Tobacco Company
David Martin	Lorillard Tobacco Company
Connie Iversen	Lorillard Tobacco Company
Philip Cohen	The American Tobacco Company
Kirk Kolbo	The Council for Tobacco Research - U.S.A., Inc.
R. Lawrence Purdy	The Council for Tobacco Research - U.S.A., Inc.
Hal Shillingstad	The Tobacco Institute, Inc.

Members of the public and media also attended and observed the proceedings.

I. THE JOINT DEFENSE/COMMON INTEREST PRIVILEGE

1. Product liability litigation involving more than one of the major cigarette manufacturers began in March, 1954 when the smoking and health lawsuit, Lowe v. R.J. Reynolds, et al., was filed. (See Affidavit of Lawrence E. Savell, ¶ 8, June 20, 1996.) The defendants have engaged in a joint defense effort and shared information in furtherance of common legal interests since at least 1954. (See Affidavits of James W. Dobbins, ¶ 15, June 20, 1996; Denise F. Keane, ¶ 6, June 20, 1996; Ronald F. Bianchi, ¶ 15, April 7, 1997; Arthur J. Stevens, ¶ 14, April 7, 1997; Lawrence E. Savell, ¶ 14, June 20, 1996; Susan B. Saunders, ¶ 10, June 19, 1996; William Adams, ¶ 9, June 19, 1996; and Declaration of Alexander Holtzman, ¶ 4, May 15, 1996.) The defendants' coordinated defense efforts have included meetings among counsel, exchanging materials prepared in anticipation of litigation, and identifying and consulting with potential expert witnesses. Id. In June, 1954, the first smoking and health lawsuit with Liggett & Myers,

Inc. ("Liggett") as a co-defendant, Deutsch v. R.J. Reynolds, et al., was filed. (See Affidavit of James W. Dobbins, ¶ 7, June 20, 1996.) In 1964, the first smoking and health lawsuit involving the Council for Tobacco Research - U.S.A., Inc. ("CTR") and the Tobacco Institute, Inc. ("TI") as co-defendants, Fine v. Philip Morris Inc., et al., was filed. (See Affidavit of Lawrence E. Savell, ¶ 13, June 20, 1996.) Since 1954, smoking and health litigation has been pending continuously against one or more of the major cigarette manufacturers, CTR and TI. (Id. at ¶ 9; Affidavits of James W. Dobbins, ¶ 8, June 20, 1996; Ronald F. Bianchi, ¶ 8, April 7, 1997; and Arthur J. Stevens, ¶ 8, April 30, 1996.) Such litigation has raised recurring factual and legal issues common to the defendants, including allegations of injury from smoking and the use of false statements in cigarette advertising, among others. (See Declaration of Alexander Holtzman, ¶ 5, April, 1997 and Declaration of Philip H. Cohen, Exhibits A, B and M, May 23, 1997.)

2. In the 1950's, regulatory activities (apart from continuing antitrust scrutiny) affecting the cigarette industry as a whole began to accelerate. Such activities have continued unabated from the 1950's to the present and have occurred on a federal, state, local and international level. These activities have involved a wide variety of federal regulatory agencies including the Federal Trade Commission ("FTC"), the Federal Communications Commission ("FCC"), the Food and Drug Administration ("FDA"), the Civil Aeronautics Board ("CAB") and the Environmental Protection Agency ("EPA") among others. (See, e.g., Defendants' Exhibit 37.)¹ The activities have covered a wide range of issues, including cigarette

¹ All references herein, unless otherwise indicated, are to the Bates numbers of documents produced in this action and made a part of the parties' submissions with respect to these hearings. This document, for example, was produced by CTR for the Minnesota litigation (this action) and is Bates-stamped number 11309817. In addition, documents (where applicable) are referenced to the briefing book provided by plaintiffs at the Liggett Hearing commencing July 16, 1997. This document, for example, would be cited as Plaintiffs' Tab 1. Finally, the references to documents also include a citation to plaintiffs' exhibit numbers. Thus, a document cited Plaintiffs' Ex. XX(1) correspond to exhibits from the Affidavit of Tara D. Sutton dated April 8, 1997. Documents cited Plaintiffs' Ex. XX(2) correspond to the April 11, 1997 Sutton Affidavit and documents cited Plaintiffs' Ex. XX(3) correspond to the July 7, 1997 Sutton Affidavit.

advertising; placement and use of health warning notices on cigarette packages and in cigarette advertising; placement and use of tar and nicotine yields on cigarette packages and in cigarette advertising; restriction and prohibition of broadcast cigarette advertising; testing of cigarettes for tar, nicotine and carbon monoxide yields; excise taxes; reporting of ingredients used in cigarette manufacturing; restriction and prohibition of smoking aboard commercial aircraft, interstate buses and interstate trains; and, smoking in public places, among others. (See e.g., LG 2005566 - 2005579; LG 2024333 - 2024342; LG 2022879 - 2022898; LG 2010729 - 2010734.)

3. A review of the documents at issue and exhibits submitted by defendants establishes that federal regulatory activities since the 1950's involving the cigarette industry have included disputes between federal regulatory agencies (predominantly the FTC) and the major cigarette manufacturers. These disputes have involved a variety of issues such as cigarette advertising content and placement, broadcast cigarette advertising, the authority of the FTC to issue orders to file special reports and the authority of the FTC to promulgate regulations. (See e.g., LG 2005390 - 2005438; LG 2023211 - 2023237; LG 2023925 - 2023950.)

4. Legislative activities on the federal level affecting the cigarette industry began in at least 1957 with the "Blatnik hearings", which addressed the disclosure of tar and nicotine yields in cigarette advertising. Since 1965, the defendants have monitored proposed legislation raising issues of common interest to the industry and have attended and testified at hearings regarding a wide variety of proposed and existing legislation. (See, e.g., Defendants' Exhibit 38.)

5. Liggett's own declarations demonstrate that Liggett fully participated in and understood the terms of this joint defense effort. Liggett's Vice President and General Counsel, James W. Dobbins, testified, "Liggett and other cigarette manufacturers, TI [Tobacco Institute], and CTR have participated in a joint defense effort to defend against pending and anticipated smoking and health product liability

actions," which "has included, among other things, meetings among in-house and outside counsel representing Liggett, other cigarette manufacturers, TI and CTR; exchanging materials prepared in anticipation of litigation; and identifying and preparing expert witnesses." (See Affidavit of James W. Dobbins, ¶ 15, June 20, 1996.)

6. The joint defense/common interest privilege does not require a written agreement. As long as parties are "allied in a common legal cause," shared communications and work product are protected by the privilege. In re Regents of the University of California, 101 F.3d 1386, 1389, 1390-91 (Fed. Cir. 1996), cert. denied, 117 S. Ct. 1484 (1997). The common interest/joint defense privilege also covers legal advice and strategy relating to regulatory or legislative proceedings. See In Re Sealed Case, Nos. 96-3085, 96-3086, 107 F.3d 46 (D.C. Cir. 1997). When, as in this case, joint defense efforts have been undertaken by the parties and their respective counsel, work product exchanged between counsel and confidential communications related to that common interest are protected from disclosure by the privilege. E.g., United States v. Schwimmer, 892 F.2d 237, 243 (2d Cir. 1989), on remand, 738 F. Supp. 654 (E.D. N.Y. 1980), aff'd, 924 F.2d 443 (2d Cir. 1991), cert. denied, 502 U.S. 810 (1991).

7. The joint defense privilege cannot be waived without the consent of all parties to the defense. John Morrell & Co. v. Local Union 304A of United Food & Commercial Workers, 913 F.2d 544, 556 (8th Cir. 1990), cert. denied, 500 U.S. 905 (1991); United States v. Bicoastal Corp., 819 F.Supp. 156 (N.D. N.Y. 1993). Consequently, no individual defendant, including Liggett, can unilaterally waive the joint defense privilege. No defendant, excluding Liggett, has waived the joint defense or common interest privilege.

II. PLAINTIFFS' ASSERTION OF THE CRIME-FRAUD EXCEPTION

By an Order dated May 9, 1997, Judge Fitzpatrick of the Ramsey County Minnesota District Court concluded that plaintiffs had established a prima facie case of crime fraud in this case, sufficient to

permit an in camera inspection of documents and to create the need for additional proceedings to permit the defendants an opportunity to rebut plaintiffs' evidence. The hearings which occurred on July 16, 17 and 18, 1997, provided the Defendants the opportunity to offer such evidence, as they saw fit, to respond to plaintiffs' prima facie showing. During these hearings, substantial evidence and argument was offered on an in camera basis, i.e., plaintiffs were excluded from the proceedings.

A. PLAINTIFFS' EVIDENCE DIRECTED AT A PRIMA FACIE DEMONSTRATION OF CRIME/FRAUD

1. Plaintiffs have produced evidence that the defendants have acted in concert for their mutual benefit and defense, at least since 1954, when each of the defendants with the exception of Liggett (the "defendants" or the "non-settling defendants"), published a document under the name Tobacco Industry Research Committee, now the defendant The Counsel for Tobacco Research - U.S.A., Inc. ("CTR"). This document, entitled "A Frank Statement to Cigarette Smokers" ("Frank Statement"), challenged the "theory that cigarette smoking is in some way linked with lung cancer in human beings." Plaintiffs' Tab 1, Plaintiffs' Ex. 2(1) (CTR MN 11309817).

2. In the "Frank Statement," the non-settling defendants made the following statements, among others:

We accept an interest in people's health as a basic responsibility, paramount to every other consideration in our business.

We always have and always will cooperate closely with those whose task it is to safeguard the public health.

We are pledging aid and assistance to the research effort into all phases of tobacco use and health.

The "Frank Statement" also made three specific promises:

1. We are pledging aid and assistance to the research effort into all phases of tobacco use and health. This joint financial aid will of

course be in addition to what is already being contributed by individual companies.

2. For this purpose we are establishing a joint industry group consisting initially of the undersigned. This group will be known as TOBACCO INDUSTRY RESEARCH COMMITTEE.

3. In charge of the research activities of the Committee will be a scientist of unimpeachable integrity and national repute. In addition there will be an Advisory Board of scientists disinterested in the cigarette industry. A group of distinguished men from medicine, science, and education will be invited to serve on this Board. These scientists will advise the Committee on its research activities.

1. In December 1970, the Tobacco Institute ran a statement declaring that "[f]rom the beginning, the tobacco industry has believed that the American people deserve objective scientific answers." Plaintiffs' Tab 3, Plaintiffs' Ex. 5(1), TIMN 0081352. The statement also represented that "in the interest of absolute objectivity, the tobacco industry has supported totally independent research with completely non-restricted funding" and that "the findings are not secret." Id.

2. In 1971, the Tobacco Institute in a press release stated, in reference to finding the "keys" which might unlock the door blocking the State between statistical evidence and causation:

Any organization in a position to apply resources in the search for those keys - and which fails to do so - will continue to be guilty of cruel neglect of those whom it pretends to serve.

Plaintiffs' Tab 4, Plaintiffs' Ex. 6(1), LG 0069275 at 0069279.

1. In a 1972 Wall Street Journal article, James Bowling, a Vice President of Defendant Philip Morris, Inc., ("PM") was quoted as saying:

If our product is harmful. . . we'll stop making it. We now know enough that we can take anything out of our product, but we don't know what ingredients to take out.

Plaintiffs' Tab 5, Plaintiffs' Ex. 7(1), RJR 500324162 at 500342163.

1. In 1982, the Tobacco Institute published a pamphlet in which it wrote:

Since the first questions were raised about smoking as a possible health factor, the tobacco industry has believed that the American people deserve objective, scientific answers. The industry has committed itself to this task.

Plaintiffs' Tab 49, Plaintiffs' Ex. 8(1), B&W 670500617.

1. In 1990, a public relations employee of Defendant R.J. Reynolds Tobacco Company ("RJR") wrote a letter to a person by the name of Rook in Minnesota, apparently in response to a letter from Rook. The public relations employee asserted in that letter that ". . . scientists do not know the cause or causes of the chronic diseases reported to be associated with smoking." The letter went on:

Our company intends, therefore, to continue to support [research] in a continuing search for answers.

Plaintiffs' Ex. 9(1), RJR 507703861-03862.

1. One way in which the industry publicly stated that it would fulfill this promise to conduct and disclose objective research was through the auspices of the CTR (originally named the Tobacco Industry Research Council, or TIRC). Internal documents, however, imply that top officials from the tobacco industry privately acknowledged that, contrary to the public representations, CTR was meant to serve primarily a public relations function and that CTR scientific research was of little value in addressing issues relating to the causal link between smoking and health. For example:

2. In May 1958, a BAT scientist² (and others from the British tobacco industry) visited representatives of the U.S. industry and found that:

Liggett & Meyers stayed out of T.I.R.C. originally because they doubted the sincerity of T.I.R.C.'s motives and believed that the organization was too unwieldy to work efficiently. They remain convinced that their misgivings were justified. In their opinion T.I.R.C. has done little if anything constructive, the constantly reiterated "not proven" statements in the face of mounting contrary evidence has thoroughly discredited T.I.R.C., and the S.A.B. of

² As used herein, the term "BAT" refers to defendants B.A.T. Industries P.L.C., British-American Tobacco Company Limited, and/or BAT (U.K. & Export) Limited.

T.I.R.C. is supporting almost without exception projects that are not related directly to smoking and lung cancer.

Plaintiffs' Tab 7, Plaintiffs' Ex. C(2), p. 5, BAT 105408490 at 8494.

1. In another trip report written in 1964 by British scientists, it was stated:

[B]oth L&M and Lorillard scientists told us quite bluntly that they considered TRC [the British trade group] research was on the correct basis and CTR largely without value.

Plaintiffs' Tab 11, Plaintiffs' Ex. 23(3), p. 17, PM 1003119099 at 9115.

2. In 1967, W.W. Bates, Jr., Liggett's director of research, wrote to the president of the Tobacco Institute that the smoking and health problem "is basically a scientific one." Plaintiffs' Tab 12, Plaintiffs' Ex. 12(3), LG 0208295. Bates stated, however, that "So far...the major efforts of the industry have been other than scientific." Id. Bates further stated that:

The CTR and AMA programs suffer from almost the same fault. Most of their projects have only a peripheral connection to tobacco use.

Id. at LG 0209296.

3. In 1970, Helmut Wakeham, head of research and development of Philip Morris, wrote a memorandum to the president of Philip Morris, Joseph Cullman. In this memorandum, Wakeham discussed the *raison d'être* of CTR. Wakeham wrote:

It has been stated that CTR is a program to find out 'the truth about smoking and health.' What is truth to one is false to another. CTR and the Industry have publicly and frequently denied what others find as 'truth.' Let's face it. We are interested in evidence which we believe denies the allegations that cigarette smoking causes disease.

Plaintiffs' Tab 14, Plaintiffs' Ex. 14(3) (PM 2022200161, 2022200162).

4. A 1970 document discloses that another top Philip Morris scientist also questioned the worth of CTR research:

Osdene's view (Philip Morris' view?) was that C.T.R. did apparently no useful work and cost a vast amount of money.

Plaintiffs' Tab 13, Plaintiffs' Ex. 13(3), p. 2, BAT 110316203 at 204. (Thomas Osdene was a senior research and development scientist at Philip Morris.)

5. After a 1973 trip to the U.S., scientists from England wrote that:

It is difficult to avoid the sad conclusion that C.T.R. has become a backwater of little significance in the world of smoking and health.

Plaintiffs' Tab 15, Plaintiffs' Ex. 15(3), p. 28, BAT 100226995 at 7022.

6. Alexander Spears, research director at Lorillard Tobacco Company ("Lorillard"), explained to Curtis H. Judge, the chief executive officer, in a 1974 memorandum:

Historically, the joint industry funded smoking and health research programs have not been selected against specific scientific goals, but rather for purposes such as public relations, political relations, position for litigation, etc....In general, these programs have provided some buffer to public and political attack of the industry, as well as background for litigious strategy.

Plaintiffs' Tab 16, Plaintiffs' Ex. 34(1), p. 3, Lor 01421596 at 598.

7. A memorandum written in November 1978 from Philip Morris executive Robert Seligman contained the following historical account showing that CTR was not set up to conduct objective research:

...Bill Shinn [attorney at Shook, Hardy] described the history, particularly in relation to the CTR. CTR began as an organization called Tobacco Industry Research Council (TIRC). It was set up as an industry "shield" in 1954....CTR has helped our legal counsel by giving advice and technical information, which was needed at court trials. CTR has provided spokesmen for the industry at Congressional hearings. The monies spent on CTR provides a base for introduction of witnesses.

Getting away from the historical story, Bill Shinn mentioned that the "public relations" value of CTR must be considered and continued.... A very interesting point, made by Bill Shinn, is the opposition's, "the case is closed with regard to smoking and disease."...It is extremely important that the industry continue to spend their dollars on research to show that we don't agree that the case against smoking is closed....There is a 'CTR' basket that must be maintained for PR purposes.

1. One handwritten note, believed to be written by Addison Yeaman, the chairman of CTR, summed up the fact that CTR was created to protect the industry, not the public health. These notes, entitled "CTR Meeting," state:

CTR is best and cheapest insurance the tobacco industry can buy, and without it the industry would have to invent CTR or would be dead.

Plaintiffs' Tab 17, Plaintiffs' Ex. 16(3), Lor 03539541.

2. There also is evidence that for years the industry acted in concert to suppress or eliminate internal research on smoking and health, notwithstanding the industry's public representations to conduct research into "all phases of tobacco use and health" and report all facts to the public. Plaintiffs' Tab 1, Plaintiffs' Ex. 2(1), CTR MN 11309817. For example:

3. In 1968, Philip Morris director of research Wakeham described a "gentlemans agreement" under which the companies had agreed to refrain from conducting in-house biological experiments on tobacco smoke. Wakeham stated:

We have reason to believe that in spite of gentlemans agreement from the tobacco industry in previous years that at least some of the major companies have been increasing biological studies within their own facilities.

Plaintiffs' Tab 18, Plaintiffs' Ex. G(2), p. 4, PM 1001607055 at 058.

4. A 1970 memo by D.G. Felton, a BAT senior scientist, also referenced this "tacit agreement" not to conduct in-house biological research. Plaintiffs' Tab 19, Plaintiffs' Ex. 24(3), p. 2, BAT 110315968 at 969. This memo further described how this "tacit agreement" led one company -- Philip Morris -- to direct another company -- RJR -- to shut down its in-house biological work. After learning that RJR was conducting biological studies, Philip Morris president Cullman lodged a complaint with RJR president Galloway. The result was a "sudden reorganization at Reynolds, resulting in the closure of the biological section." *Id.*, pp. 2-3. This later became known as the "mouse house" incident.

5. An April 1980 letter from Robert Seligman, a top executive in research and development at Philip Morris, to Alexander Spears, a senior scientist at Lorillard, listed potential areas of scientific research for the industry. Seligman included a list of "subjects which I feel should be avoided." Plaintiffs' Tab 20, Plaintiffs' Ex. 20(3), p. 1, Lor 01347175. The list entitled "Subjects To Be Avoided" included:

1. Developing new tests for carcinogenicity.
2. Attempt to relate human disease to smoking.

Id., p. 3 (emphasis added).

1. Plaintiffs have presented substantial evidence showing involvement in scientific research and other scientific matters by attorneys for the tobacco industry, and that industry attorneys were a driving force behind the direction of and the suppression of scientific research. For example:

2. In 1978, Sheldon Sommers, M.D., who was then Chairman of the CTR Scientific Advisory Board, complained to William Gardner, who was then the Scientific Director for CTR, that he [Sommers] was unable to understand the legal counsel he was being given. The import of Sommers' letter was that the CTR lawyers were controlling tobacco research by CTR based upon legal considerations. Plaintiffs' Tab 27, Plaintiffs' Ex. 33(1), CTR SF 0800031. Sommers also stated:

I think CTR should be renamed Council for Legally Permitted Tobacco Research, CLIPT for short.

Id.

3. A hand-written memorandum dated April 21, 1978, produced from the files of defendant Lorillard, complains that:

We have again abdicated the scientific research directional management of the Industry to the "Lawyers" with virtually no involvement on the part of the scientific or business management side of the business.

Plaintiffs' Tab 28, Plaintiffs' Ex. 25(3), LOR 01346204.

1. A 1976 internal memo by a tobacco scientist at BAT, S.J. Green, also discusses the extent to which "legal considerations" dominated scientific research:

The public position of tobacco companies with respect to causal explanations of the association of cigarette smoking and diseases is dominated by legal considerations. . . By repudiation of a causal role for cigarette smoking in general they [the companies] hope to avoid liability in particular cases. This domination by legal consideration thus leads the industry into a public rejection in total of any causal relationship between smoking and disease and puts the industry in a peculiar position with respect to product safety discussions, safety evaluations, collaborative research etc.

Plaintiffs' Tab 35, Plaintiffs' Ex. 39(1), BAT 109938433.

1. A 1964 trip report by English scientists described how a powerful committee of U.S. lawyers was dominant in the smoking and health arena:

This Committee is extremely powerful; it determines the high policy of the industry on all smoking and health matters - research and public relations matters, for example, as well as legal matters - and it reports directly to the presidents.

. . .

The lawyers are thus the most powerful group in the smoking and health situation.

Plaintiffs' Tab 11, Plaintiffs' Ex. 23(3), p. 7, PM 1003119099 at 105, 106. This Committee, later known as the Committee of Counsel, also was involved in "clearing papers (e.g. Dr. Little's annual report)." Id. Dr. Little was the first director of CTR; thus, a powerful committee of lawyers was involved in "clearing" CTR's annual reports on scientific research.

34. It appears that one method by which attorneys may have controlled research is through maneuvers intended to "create" privileges. In November, 1979, the corporate counsel for B&W, Kendrick Wells, wrote a memorandum to Ernest Pepples, B&W's vice president of law. Plaintiffs' Ex. 43(1), PM 2048322229. In this memorandum, Wells outlined a plan to wrap scientific information in attorney-client privilege. Mr. Wells' proposal specifically provided that ". . . in the operational context BAT would send documents without attempting to distinguish which were and which were not litigation documents." PM 20483222230.

1. Defendants also presented evidence at the three days of hearings showing that scientific research is directed into different classifications, with some scientific research being withheld on the basis of privilege. Defendants' Exhibit 41 depicts how "Industry Counsel" directed three categories of research: "Special Account Recipients (Confidential Consultants)," "Special Account Recipients" and "Special Projects Recipients."

2. The defendants and their representatives have, in fact, been aware that cigarette smoking is probably hazardous to the health of the smoker. A statistical association between smoking and illness has been conceded by the defendants, but there has been a long standing scientific and public relations dispute as to whether one can infer "causation" from such an association.

3. For example, in April and May of 1958, three British scientists (including at least one from BAT, D.G. Felton) visited top officials and scientists in the U.S. tobacco industry, including those at TIRC, Liggett, Philip Morris and the American Tobacco Company. Plaintiffs' Tab 7, Plaintiffs' Ex. C(2), p. 1, BAT 105408490. One object of the visit was to find out "the extent in which it is accepted that cigarette smoke 'causes' lung cancer." Id., p. 2. The British scientists reported widespread acceptance of causation:

With one exception (H.S.N. Greene) [not formally affiliated with any tobacco company] the individuals with whom we met believed that smoking causes lung cancer if by "causation" we mean any chain of events which leads finally to lung cancer and which involves smoking as an indispensable link. In the U.S.A. only Berkson, apparently, is prepared now to doubt the statistical evidence and his reasoning is nowhere thought to be sound.

Id., p. 2. The authors concluded that there was no serious dispute that the statistical associations constituted a "cause and effect" phenomenon:

Although there remains some doubt as to the proportion of the total lung cancer mortality which can be fairly attributed to smoking, scientific opinion in the U.S.A. does not now seriously doubt that the statistical correlation is real and reflects a cause and effect relationship.

Id., p. 8.

1. In 1959, an RJR scientist, Alan Rodgman, concluded that there is a "distinct possibility" that substances in cigarette smoke could have a carcinogenic effect. Plaintiffs' Ex. 21(1), RJR 500945942.

2. In 1962, Rodgman wrote:

The amount of evidence accumulated to indict cigarette smoke as a health hazard is overwhelming, [while] the evidence challenging the indictment is scant.

Plaintiffs' Tab 32, Plaintiffs' Ex. 22(1), p. 4, RJR 504822847 at 504822850.

3. In 1964, Philip Morris scientist Wakeham examined the first Surgeon General's Report -- which found that smoking was causally related to lung cancer in men -- and found that "little basis for disputing the findings at this time has appeared." Plaintiffs' Tab 33, Plaintiffs' Ex. 24(1), p. 1, PM 1000335612. Wakeham commented on "[t]he professional approach" of the Surgeon General's committee.

Id., p. 2.

4. In 1967, G.F. Todd of the Tobacco Research Council [the British counterpart to TIRC/CTR] wrote a letter to Mr. Addison Yeaman, the vice president and general counsel of Brown & Williamson Tobacco Corporation. In his letter, Todd observed:

The only real difficulties that we encountered arose out of the unavoidable paradox at the centre of our operations - namely that, on the one hand the manufacturers control TRC's operations and do not accept that smoking has been proved to cause lung cancer while, on the other hand, TRC's research program is based on the working hypothesis that this has been sufficiently proved for research purposes. In addition, the Council senior scientists accept that causation theory . . . We have not yet found the best way of handling this paradox.

Plaintiffs' Tab 34, Plaintiffs' Ex. 26(1), LG 298942 at 298943.

1. In October 1976, BAT scientist S.J. Green criticized the industry's public position on causation:

The problem of causality has been inflated to enormous proportions. The industry has retreated behind impossible demands for 'scientific proof' whereas such proof has

never been required as a basis for action in the legal and political fields. Indeed if the doctrine were widely adopted the results would be disastrous.

Plaintiffs' Tab 35, Plaintiffs' Ex. 39(1), p. 1, BAT 109938433. Dr. Green concluded that "It may therefore be concluded that for certain groups of people smoking causes the incidence of certain diseases to be higher than it would otherwise be." Id., p. 4.

2. In 1979, P.N. Lee of BAT expressed his impressions of a 1979 Surgeon General's report dated January 11, 1979. In this memorandum, Lee considered at length the Tobacco Institute publication entitled "The Continuing Controversy," also identified as TA73. Plaintiffs' Tab 48, Plaintiffs' Ex. 28(1), BAT 100214029, beginning at 100214045. That document itself is identified as TIMN 84430. Lee characterized the report as "misleading." He wrote that the report did not appear to understand what causation is. Lee wrote:

Discussion of the role of other factors can be particularly misleading when no discussion is made of relative magnitudes of effects. For example, heavy smokers are observed to have 20 or more times the lung cancer rates of non-smokers. Sure, this does not prove smoking causes lung cancer, but what it does mean, and TA73 never considers this, is that for any other factor to explain this association, it must have at least as strong an association with lung cancer as the observed association for smoking (and be highly correlated with the smoking habit).

TA73 seems ready to accept evidence implicating factors other than smoking in the aetiology of smoking associated disease without requiring the same stringent standards of proof that it requires to accept evidence implicating smoking. This is blatantly unscientific.

BAT 100204046.

1. In fact, in 1980 BAT considered breaking ranks with the industry and admitting that smoking causes disease because BAT acknowledged that the "no causation" position was not credible:

The company's position on causation is simply not believed by the overwhelming majority of independent observers, scientists and doctors. The industry is unable to argue satisfactorily for its own continued existence because all the arguments eventually lead back to the primary issue of causation, and on this point, our position is unacceptable.

Plaintiffs' Tab 36, Plaintiffs' Ex. 30(1), p. 2, BAT 109881322 at 323. The countervailing interest to this break from the industry's public dogma was the "severe constraint of the American legal position." *Id.*, p. 10.

1. In 1982, a BAT consultant, Francis Roe, found the industry position on causation "short of credibility," noting that "[i]t is not really true, as the American Tobacco industry would like to believe, that there is a raging worldwide controversy about the causal link between smoking and certain disease." Plaintiffs' Tab 37, Plaintiffs' Ex. 79(3), BAT 100432193.

2. Notwithstanding these internal documents, the industry's public relations strategy has been to deny causation and to keep the controversy alive.

3. Over the years, tobacco industry spokespersons made many comments clearly intended to create doubt as to a connection between smoking and illness. For example:

4. In 1962, the Tobacco Institute issued a press release stating that:

The causes of cancer are not now known to science. Many factors are being studied along with tobacco. The case against tobacco is based largely on statistical associations, the meanings of which are in dispute.

Plaintiffs' Tab 2, Plaintiffs' Ex. 4(1), PM 1005136953.

5. In 1969, a CTR press release stated:

There is no demonstrated causal relationship between smoking and any disease....If anything, the pure biological evidence is pointing away from, not toward, the causal hypothesis.

Plaintiffs' Tab 40, Plaintiffs' Ex. 12(1), B&W 670307882.

6. In 1970, a CTR press release said:

The deficiencies of the tobacco causation hypothesis and the need of much more research are becoming clearer to increasing numbers of research scientists.

Plaintiffs' Tab 41, Plaintiffs' Ex. 13(1), RJR 50001 5901.

7. In 1970, a Tobacco Institute advertisement stated:

After millions of dollars and over 20 years of research: The question about smoking and health is still a question.

Plaintiffs' Tab 3, Plaintiffs' Ex. 5(1), TIMN 0081352.

8. In 1972, a Tobacco Institute press release, stated:

The 1972 report of the Surgeon General...'insults the scientific community'...'[T]he number one health problem is not cigarette smoking, but is the extent to which public health officials may knowingly mislead the American public.'

Plaintiffs' Tab 44, Plaintiffs' Ex. 14(1), TIMN 012062.

53. In 1977, a Tobacco Institute pamphlet stated:

Has the Surgeon General's report established that smoking causes cancer or other disease?
No.

Plaintiffs' Tab 45, Plaintiffs' Ex. 25(1), TIMN 0055129.

1. In 1978, a Tobacco Institute pamphlet stated:

The flat assertion that smoking causes lung cancer and heart disease and that the case is proved is not supported by many of the world's leading scientists.

Plaintiffs' Tab 44, Plaintiffs' Ex. 14(1), TI 120602.

1. In 1979, the Tobacco Institute circulated a report entitled "Smoking and Health 1964-1979: The Continuing Controversy." This report, which followed the 1979 Surgeon General's Report, stated that:

The American public would be better served if high government health officials and private interest groups which encourage them abandoned the myth of waging war against diseases and their alleged causes.... Indeed, many scientists are becoming concerned that preoccupation with smoking may be both unfounded and dangerous. Unfounded because evidence on many critical points is conflicting. Dangerous because it diverts attention from other suspected hazards.

Plaintiffs' Tab 47, Plaintiffs' Ex. 29(1), TIMN 0084430. (Internally, however, the tobacco industry acknowledged that the 1979 Surgeon General's report was "no doubt...an impressive document" and that

"[t]he way in which the information was presented was on the whole sound, scientific and emotive."

Plaintiffs' Tab 48, Plaintiffs' Ex. 28(1), at 2, BAT 100214029 at 030.)

2. In 1983, an RJR advertisement said:

It has been stated so often that smoking causes cancer, it's no wonder most people believe this is an established fact. But, in fact, it is nothing of the kind. The truth is that almost three decades of research have failed to produce scientific proof for this claim...in our opinion, the issue of smoking and lung cancer is not a closed case. It's an open controversy.

Plaintiffs' Ex. 16(1), RJR 504638051.

3. On February 2, 1984, the chairman of the board of RJR made the following comments as part of a panel discussion on the Nightline television program:

- It is not known whether cigarettes cause cancer. RJR 502371216.
- Despite all the research to date, there has been no causal link established [between smoking and emphysema]. RJR 502371217.
- ...as a matter of fact, there are studies that while we are accused of being associated with heart disease, there have been studies conducted over ten years that would say, again, that science is still puzzled over these forces. RJR 502371217.

Plaintiffs' Tab 50, Plaintiffs' Ex. 17(1), RJR 502371216.

1. These types of repeated statements by the tobacco industry denying or diminishing the health effects of smoking also were published in Minnesota. For example, the St. Paul Pioneer Press published the following articles:

2. On October 13, 1954, the Pioneer Press quoted Timothy Hartness, chairman of TIRC, as stating that "no clinical evidence has yet established tobacco to be the cause of human cancer." Plaintiffs' Ex. 395.

3. On November 24, 1954, the Pioneer Press quoted E. A. Darr, president of RJR, as stating that "there still isn't a single shred of substantial evidence to link cigarette smoking and lung cancer directly." Id.

4. On April 19, 1963, the Pioneer Press quoted the director of the CTR scientific advisory board, C.C. Little, as stating:

It is at present scientifically unwise and indeed may be harmful to attribute a simple definitive causative role to any one of them or to attempt to assign them relative degrees of importance.

Id.

5. On February 7, 1965, the Pioneer Press quoted a tobacco industry spokesman saying that the link between smoking and disease is still unproved despite the Surgeon General's report. Id.

6. On August 17, 1968, the Pioneer Press quoted the Tobacco Institute as attacking a Surgeon General's task force for a "shockingly intemperate defamation of an industry which has led the way in medical research to seek answers in the cigarette controversy." Id.

7. On January 4, 1971, the Pioneer press quoted Joseph Cullman III, the CEO of Philip Morris, as reiterating the industry position that cigarettes "have not been proved to be unsafe" to human health. Id.

8. On January 11, 1979, the Pioneer Press quoted the Tobacco Institute as stating that the "preoccupation with smoking may be both unfounded and dangerous. . . because evidence on many critical points is conflicting. . . (and it) diverts attention from other suspected hazards." Id.

III. DEFENDANTS REBUTTAL EVIDENCE

9. In the early 1950's, several researchers reported the results of laboratory and epidemiological studies that, they claimed, linked smoking to disease. See Affidavit of Kenneth M. Ludmerer, M.D., dated February 12, 1997.

10. On January 4, 1954, in response to widespread publicity generated by these studies, the major cigarette manufacturers (except Liggett) and other tobacco-related organizations caused "A Frank Statement to Cigarette Smokers" to be published in numerous newspapers. (See Finding 9 above). The

"Frank Statement" stated that these companies were forming a "joint industry group," to be known as the Tobacco Industry Research Committee ("TIRC"). 1954 Frank Statement, Pl. Ex. 2 (1).

11. Because of concerns relating to a long history of antitrust difficulties and litigation dating back to at least 1911, representatives of the tobacco industry invited the United States Department of Justice ("DOJ") to meet with them to discuss the formation of TIRC. Although DOJ declined to attend this meeting, the tobacco companies kept DOJ advised as to the industry's joint research efforts through CTR and in January 1954 provided DOJ with a copy of CTR's "Statement of Purpose." See Affidavit of Irwin Tucker dated January 28, 1997 ¶ 4; *In Camera* and *Ex Parte* Affidavit of Edwin J. Jacob, dated February 15, 1997, ¶¶ 48-51.

12. In 1964, TIRC changed its name to The Council for Tobacco Research -- U.S.A. In 1971, The Council for Tobacco Research -- U.S.A., Inc. was incorporated. See Affidavit of Glenn, ¶ 6. These organizations collectively are referred to herein as "CTR".

The Nature of CTR

13. The uncontroverted evidence before the Court establishes that: (1) the major U.S. tobacco companies, other than Liggett, have been members of CTR since 1954, See Affidavit of Glenn, ¶¶ 6,8; (2) Liggett was a member of CTR from 1964 to 1968, and (3) after its withdrawal from CTR, Liggett participated in some jointly-sponsored research activities including certain CTR Special Projects research.

14. Continuously since 1954, CTR has acted as a joint industry group for the tobacco companies that are its members. CTR's principal function throughout that time has been to fund scientific research by receiving monies from the tobacco companies and providing them to scientific investigators. See Affidavit of Glenn, ¶¶ 6-9; See Affidavit of McAllister, ¶ 7.

15. Since 1954, one of CTR's principal activities has been to fund scientific research by independent scientists through its grant-in-aid program, under the supervision of its Scientific Advisory

Board (SAB) supplemented on occasion by research contracts. See Affidavit of Glenn, ¶ 7; See Affidavit of McAllister, ¶ 7. (CTR itself has not conducted any scientific research. See Affidavit of Glenn, ¶ 9.) Through this research program, from 1954 through 1996 CTR has provided approximately \$282 million to fund over 1,500 research projects by approximately 1,100 independent scientists. See Affidavit of Glenn, ¶ 16; 1996 Report of The Council for Tobacco Research -- U.S.A., Inc. p. 5.

16. The researchers who have received CTR grant funding have been affiliated with approximately 300 medical schools, universities, hospitals and other research institutions, including such prestigious institutions as Harvard Medical School, Yale School of Medicine, Stanford University, numerous institutions in the University of California system, Johns Hopkins School of Medicine, the University of Chicago Medical Center, the Scripps Research Institute, the Mayo Clinic and the Salk Institute. See Affidavit of Glenn, ¶ 9 & Ex. B. The researchers who have received this funding have not been employees of the tobacco companies or CTR. CTR's grantees have included many distinguished scientists, three of whom have won Nobel Prizes. See Affidavit of Glenn, ¶ 10; See Affidavit Rubin, ¶ 8 (4/25/96).

17. The evidence presented included an affidavit by Dr. Emanuel Rubin, the Chairman of the Department of Pathology at Jefferson Medical College, who has reviewed CTR's grant-in-aid program. Dr. Rubin concluded that "CTR funded excellent research by well-qualified scientists that was relevant to the scientific issues associated with tobacco use and health." See Affidavit of Rubin, ¶ 6 (2/10/97).

18. CTR's written policy provides that SAB grant-in-aid recipients are to "work with the greatest freedom," and are allowed to publish their results in scientific journals. See Affidavit of McAllister, ¶16 & Ex. A. CTR encourages such publication. See Affidavit of Glenn, ¶ 14. Since 1956, research projects funded by CTR grants and contracts have resulted in approximately 6,100 scientific publications, many of which have been in highly respected, peer-reviewed scientific journals that are

frequently cited in the scientific literature. See Affidavit of Glenn, ¶ 16; 1996 Report of the Council for Tobacco Research -- U.S.A., Inc. p. 5; See Affidavit of McAllister, ¶¶ 19-21.

19. Each year since 1956, CTR has made available to the scientific community an Annual Report containing abstracts of reports of research by CTR grant-in-aid requests that have been published in scientific journals, and a list of the research projects being funded by CTR SAB grantees. Report of the Council for Tobacco Research -- U.S.A., Inc. (1956-1996); See Affidavit of Glenn, ¶ 15; See Affidavit of McAllister, ¶ 8; Sommers Cipollone Tr. 8587-88; See Affidavit of Rubin, ¶ 7 (4/25/96). In this way, the research results from CTR's SAB grant-in-aid program have been shared with the scientific community.

20. There is no evidence in the record before the Court that, over the course of CTR's 43 years, CTR has prevented any of its over 1,100 SAB grantees from publishing their research findings. See Affidavit of McAllister, ¶ 18.

21. There is no evidence in the record before the Court that, over the course of CTR's 43 years, any scientific research by CTR SAB grantees has been tainted by scientific impropriety, such as the falsification of data or improper reporting of research results.

22. Some of the research funded through CTR grants has led to reported findings that have linked smoking with diseases including lung cancer and emphysema, and that have supported the view that cigarettes are addictive. The evidence presented included the affidavits of Dr. Rubin, who stated that "[numerous publications from CTR-funded research provide important information indicating adverse effects of cigarette smoking." See Affidavit of Rubin, ¶ 6 (2/10/97). Some of these research findings have been reported in the general media. See Affidavit of McAllister, ¶ 22 & Ex. O; 10/22/66 Article of the N.Y. Times (Ex. 46). Over 250 of the scientific articles published by CTR grantees have been cited in reports relating to smoking and health of the U.S. Surgeon General (or his advisory committee), and 75

were cited in the 1996 report by the Food and Drug Administration on nicotine. See Affidavit of McAllister, ¶¶ 19, 23, 24.

23. Many of the researchers who have received CTR SAB grants have also received co-funding for their research from organizations such as the American Cancer Society, the National Cancer Institute and the National Institutes of Health. See Affidavit of Glenn, ¶¶11.

24. The research conducted by CTR SAB grantees has been directed to matters concerning tobacco use and health, and in particular to the causation of diseases associated with smoking. See Affidavit Rubin, ¶6 (2/20/97); See Affidavit of Glenn, ¶¶ 17,19; See Affidavit of McAllister, ¶¶ 26-28; See Affidavit of Lisanti, ¶22 (4/11/97). The focus of that research has shifted over the years, since 1954, in accord with changes in scientific research generally. See Affidavit of Rubin, ¶¶ 14-15 (2/10/97); See Affidavit of Glenn, ¶¶18, 19; See Affidavit of McAllister, ¶¶ 27, 28.

25. In 1954, CTR appointed as its Scientific Director Dr. Clarence Cooke Little, a nationally known scientist. See Affidavit of Glenn, ¶ 8. Dr. Little was the founder and director of the Jackson Memorial Laboratory in Bar Harbor, Maine. He had been the President of the University of Michigan and the University of Maine, and had been the managing director of the forerunner of the American Cancer Society. See Affidavit of Glenn¶ 8. As Scientific Director of CTR, Dr. Little was responsible for CTR's scientific program. See Affidavit of Lisanti, ¶ 7 (4/11/97). Dr. Little served as CTR's Scientific Director from 1954 until 1971. See Affidavit of Glenn, ¶ 8. He was succeeded as Scientific Director of CTR by other prominent scientists. See Affidavit of Lisanti ¶ 9 (4/11/97).

26. The appointment of Dr. Little as the Scientific Director of CTR was consistent with the statement in the 1954 Frank Statement that a scientist of "unimpeachable integrity and national repute" would be in charge of CTR's research activities.

27. In 1954, CTR formed a Scientific Advisory Board ("SAB") to guide its grant-in-aid program by evaluating applications for funding received by CTR. See Affidavit of Glenn, ¶ 12; *In Camera* and *Ex Parte* Affidavit of Edwin J. Jacob, ¶¶ 27-29. The SAB originally consisted of seven members, and that number has gradually increased to 15. See Affidavit of Glenn, ¶ 12; See Affidavit of McAllister, ¶ 15; 1996 Report of the Council for Tobacco Research -- U.S.A., Inc.

28. The members of the SAB have not been CTR employees (except for CTR's Scientific Director, who has been both a CTR employee and a member of the SAB). See Affidavit of Glenn, ¶ 12. The members of the SAB have been employees of universities, medical schools and research institutions such as Harvard, the University of Chicago, Stanford, Johns Hopkins, the University of Southern California and Duke. See Affidavit of McAllister, ¶ 15; Report of the Council for Tobacco Research -- U.S.A., Inc. (1956-1996). Several current SAB members are also members of the National Academy of Science. See Affidavit of McAllister, ¶ 15. The members of the SAB have been, and are, outstanding scientists in a number of fields, including cancer research, cardiology, pulmonology, immunology and pathology. See Affidavit of Glenn, ¶ 12; Affidavit of McAllister, ¶ 15; Affidavit of Rubin, ¶ 8 (2/10/97).

29. Since 1954, the SAB has advised CTR on the awarding of research grants-in-aid. The SAB reviews and evaluates grant proposals by a peer review process that is standard in the scientific community. See Affidavit of Glenn, ¶ 13. Grants that are approved by the SAB are evaluated and given a numerical score by each SAB member; the scores are compiled and the applications are ranked. See Affidavit of Lisanti, ¶ 4 (7/11/97); Affidavit of McAllister ¶ 13; Sommers Cipollone Tr. 8580-83. CTR's scientific staff has the actual decision-making authority to award CTR grants-in-aid. Sommers Cipollone

Tr. 8583; See Affidavit of Lisanti, ¶¶ 4-6 (7/11/97); Affidavit of McAllister ¶ 13. These decisions about the award of grants have adhered closely to the SAB's ranking of grant applications. See Affidavit of Lisanti ¶ 4 (7/11/97); Affidavit of McAllister ¶ 13.

30. CTR's procedure for evaluating and awarding research grants is similar to the procedures used by organizations that fund scientific research. Sommers Cipollone Tr. 8589; See Affidavit of Lisanti ¶ 13 (4/11/97); Affidavit of McAllister ¶ 11.

31. The tobacco company representatives constitute CTR's Board of Directors. See Affidavit of Glenn ¶ 20; Sommers Cipollone Tr. 8594; Affidavit of Lisanti ¶¶ 17, 18 (4/11/97). However, the tobacco companies deny that they have participated in or controlled the SAB's evaluations of grant proposals, or that they have participated in or controlled CTR's decisions to award research grants-in-aid. See Affidavit of Glenn ¶¶ 20, 23; Sommers Cipollone Tr. 8595; Affidavit of Lisanti ¶ 19 (4/11/97); Affidavit of McAllister ¶ 14.

32. The evidence in the record before the Court included the affidavit of from Dr. Vincent F. Lisanti, a scientist who was employed by CTR from 1964 until 1994 and attended over 90 SAB meetings. See Affidavit of Lisanti ¶¶ 15 (4/11/97). Dr. Lisanti stated:

I do not believe that the SAB ever rejected a grant application because it proposed research the results of which might be detrimental to the tobacco industry. The SAB members cared about promoting science and making a contribution to scientific knowledge, not about the potential impact of any scientific research on the interests of the tobacco companies. . . . [M]embers of the SAB were scientists and persons of great integrity. Any statement or suggestion that the evaluations and recommendations of the SAB were controlled or influenced by tobacco company lawyers is simply false.

See Affidavit of Lisanti ¶¶ 15-16 (¶¶ 4/11/97).

33. The evidence in the record before the Court also included the affidavit of Dr. James F. Glenn, CTR's Chairman and CEO (and formerly the Scientific Director of CTR), who is a professor of surgery and a former medical school dean. Dr. Glenn stated:

I am not aware of any instance during the ten years in which I have been affiliated with CTR in which any of the member companies, or any of their attorneys, have attempted in any way to influence decisions on what research will be funded as part of CTR's grant-in-aid program.

The fact is that CTR, continuously from the time that I became affiliated with it in 1987 through today, has maintained a thoroughly independent SAB and grant-in-aid program. While our members may have opinions regarding CTR's research program and are certainly entitled to express them if they wish, I can say categorically that throughout my [ten year] tenure at CTR, the grant-in-aid program has been operated independently of industry influence.

See Affidavit of Glenn ¶¶ 23, 25 (2/12/97) (emphasis added).

1. The evidence in the record before the Court also included an affidavit from Dr. Harmon C. McAllister, the Scientific Director and Vice President for Research of CTR, in which Dr. McAllister stated:

In my 14 years of experience with CTR, I have attended 28 SAB meetings at which grants were evaluated, at which more than three thousand grant-in-aid proposals have been considered. I have also attended dozens of meetings of CTR's scientific staff where grants were awarded. Throughout that time, neither the SAB nor the scientific staff of CTR has ever considered in evaluating grant applications whether the proposed research would be likely to establish connections between smoking and disease or whether the proposed research will be favored or disfavored by the tobacco industry. Throughout that time, to the best of my knowledge there has been no participation by the tobacco companies, their employees, or their lawyers in any decisions to grant or deny funding to any investigator, to any institution, or to any research area.

See Affidavit of McAllister ¶ 14 (2/12/97).

1. The evidence in the record before the Court also included testimony at a 1988 trial by former Scientific Director of CTR, Sheldon C. Sommers, who testified as follows about how he would have reacted to the tobacco companies' playing a role in the SAB grant approval process: "[I]f it had happened at the time I was invited to join [the SAB] I would certainly not have joined and if I saw it happen or knew it was happening I would resign [from the SAB]." Sommers Cipollone Tr. 8595. Dr. Sommers was a member of the SAB for 23 years, from 1966 until 1989. See Affidavit of Glenn, Ex. D.

2. With the exception of certain legal advice, and the evidence offered by Defendants as referred to below, the record does not contain evidence that lawyers determined what research would be funded by the CTR SAB grant program. See Affidavit of Lisanti ¶¶ 77 (2/14/97); *In Camera* and *Ex Parte* Affidavit of Edwin J. Jacob ¶ 41.

3. From 1978 until 1982, lawyers for CTR reviewed grant proposals to CTR that related to the effects of nicotine on the central nervous system. See Affidavit of Lisanti ¶ 27, 29 (2/14/97); *In Camera* and *Ex Parte* Affidavit of Edwin J. Jacob ¶ 41. During that period, CTR's lawyers provided legal advice about the funding by CTR of those proposals. The Court has reviewed in camera privileged information about the substance of that legal advice. See Affidavit of Lisanti ¶ 29-31 (2/14/97); *In Camera* and *Ex Parte* Affidavit of Edwin J. Jacob ¶¶ 53-63. *In Camera* and *Ex Parte* Affidavit of Edwin J. Jacob ¶¶ 41, 63.

4. 95. The Jacob and Lisanti affidavits state that the advice given to CTR by its lawyers related to the antitrust laws. Concern about a possible violation of the antitrust laws by this "joint industry group" had existed since the formation of TIRC in 1954. See Affidavit of Tucker ¶ 4. In 1954, TIRC advised DOJ in writing that it would conform to the requirements of the antitrust laws and the consent decrees affecting the tobacco industry, that it would not "give consideration to any matters affecting the business conduct or activities of its members," and that it would be "proceeding under the advice of legal counsel selected from among the counsel or nominees of its members." See Affidavit of Jacob Ex. B. The Court has reviewed in camera privileged information about this antitrust concern on the part of counsel. See Affidavit of Jacob ¶¶ 43-54.

5. Other than providing the legal advice referred to above, there is no evidence in the record before this Court that lawyers influenced the selection of research to be funded through CTR's SAB grant-in-aid program.

Research Contracts

6. In the 1970's and early 1980's, as a supplement to the grant-in-aid program, CTR began to enter into research contracts. See Affidavit of Lisanti ¶ 33 (2/14/97). Research contracts were used by CTR where grants-in-aid were not feasible, such as where the research involved large-scale, long-term inhalation studies or the development of cigarette-based technology such as standard reference cigarettes and smoking machines for use by researchers. Id.; Sommers Cipollone Tr. 8597; *In Camera* and *Ex Parte* Affidavit of Edwin J. Jacob ¶ 65. The results of CTR-funded contract research have appeared in a large number of publications in scientific journals. See *In Camera* and *Ex Parte* Affidavit of Edwin J. Jacob ¶ 70.

7. The research contracts entered into by CTR were approved by the SAB. See Affidavit of Lisanti ¶ 33 (2/14/97); Sommers Rogers Dep. Tr. 56-57.

8. 99. There is no evidence to indicate that contract research funded by CTR interfered with or compromised the integrity of the CTR grant-in-aid program.

9. Contract research is a standard and common vehicle within the scientific community for funding research, and there is nothing misleading or improper about CTR engaging in contract research. See Affidavit of Hamm ¶¶ 11,12; Sommers Cipollone Tr. 8594-95; *In Camera* and *Ex Parte* Affidavit of Edwin J. Jacob ¶ 65.

10. By funding the CTR SAB grant-in-aid and contracts programs under the guidance of the SAB, the tobacco companies that were members of CTR have acted consistently with the statement in the

1954 Frank Statement that it would provide significant "aid and assistance" to research into smoking and health.

11. 102. From about 1966 until 1990, CTR administered CTR Special Projects. The Defendants claim no privilege to the research itself nor to communications between the researchers and counsel. The researchers were free to publish their results and had the responsibility for publishing their results if they chose to do so. In Camera and Ex Parte Affidavit of Edwin J. Jacob ¶95.

12. The researchers who received funding under CTR Special Projects were informed that any publication of their research results should bear an acknowledgment that it was a "Special Project of the Counsel for Tobacco Research." There was no evidence introduced at the hearing in this matter which indicated that this acknowledgment had the effect of distinguishing Special Projects research from SAB Grant research.

13. Special Projects were scientific research projects selected for funding by the tobacco companies' litigation counsel to support the defendant's position in the litigation, legislative and regulatory contexts. See Haines Special Master Report at 8-10; See In Camera and Ex Parte Affidavit of Edwin J. Jacob ¶¶90-93. CTR provided funding for those projects out of a separate budget. Gertenbach Decl. ¶ 8; In Camera and Ex Parte Affidavit of Edwin J. Jacob ¶ 98; Affidavit of Glenn ¶¶ 32-36; Affidavit of Holtzman ¶¶ 6,9; See CTR Financial Statements, 1964-1990 attached to Affidavit of Craig Proctor.

14. Proposals for CTR Special Projects were not reviewed or evaluated by the SAB. *In Camera* and *Ex Parte* Affidavit of. Edwin J. Jacob ¶ 98. They were, however, reviewed by the Scientific Director of CTR, and a determination by the Scientific Director that a proposed CTR Special Project had scientific merit was required before it could receive funding as a CTR Special Project. See *In Camera* and *Ex Parte* Affidavit of. Edwin J. Jacob ¶ 100; Gertenbach Decl. ¶ 7; Affidavit of Glenn ¶31.

15. The researchers who received CTR Special Projects funding were affiliated with a variety of research institutions, including Harvard Medical School, the University of Pennsylvania School of Medicine, the University of California at San Francisco and Case Western Reserve University. See Affidavit of Glenn ¶ 33. Many of these researchers also received funding for their research from other services, including the National Institutes of Health and the National Cancer Institute. See Affidavit of Rubin ¶ 10 (4/25/96); Affidavit of Glenn ¶ 33 & Ex. G.

107. The recipients of CTR Special Projects funding were free to publish the results of their research. See Affidavit of Glenn¶ 34; Glenn Cong. Test. at 362-63; Affidavit of Rothschild ¶ 5; Affidavit of Schrauzer ¶¶ 4-6; Affidavit of Furst ¶ 7; Bick Decl. ¶ 9; Affidavit of Guttstein ¶ 6; Jensen Decl. ¶ 4; Holtzman Decl. ¶10. There is no evidence in the record that any CTR Special Project recipient was restricted in his or her research or publication in any way, except to the extent that the original funding decision, or funding continuation decision was made by the attorneys for defendants.

1. The evidence in the record before the Court included affidavits from several CTR Special Project researchers, who have stated as follows:

When I was awarded my CTR Special Project, I understood from the beginning that I would be free to conduct my research and publish my results without any interference. In the course of my work, no one interfered with my research or sought to influence me with respect to my work or my publications. I published over a dozen articles based on my CTR Special Project research. Gutstein Aff. ¶¶ 6, 7.

I was completely free to publish the results of my Special Projects, and the decision not to publish was entirely my own. Furst Aff. ¶ 7 (4/29/96).

From the outset, I knew that I had complete freedom to conduct my research as I saw fit, and to publish my results whenever and wherever I deemed appropriate. No one associated with CTR, the tobacco companies, or lawyers for those organizations ever attempted to influence my research or my publications. Jenson Decl. ¶ 4 (5/6/96).

I had complete freedom to conduct and report on my CTR Special Project research as I saw fit. No one from CTR, the tobacco companies or the lawyers representing the companies, ever attempted to affect my research in any way. Also, the decision not to publish was my own. Bick Aff. ¶ 9 (4/8/96).

I understood at all times that I was permitted to publish my findings from the research that was sponsored by CTR Special Projects. I estimate that 15 published articles and 17 published abstracts resulted from this research, including articles that were published in The Journal of the National Cancer Institute and Cancer, which are peer-reviewed journals. Rothschild Aff. ¶ 5 (4/30/96).

When I was awarded these CTR Special Project funds, I understood that I was entirely free to pursue my research as I saw fit and to analyze the relevant data with an open mind and without any bias or preconceptions. In the course of my work, no one interfered with my research or sought to influence me in any way with respect to the methodology or outcome of my research. At no time did anyone from the tobacco industry ever attempt to influence my thoughts or shape my research. Nor did I ever submit any draft of my research to any CTR or tobacco industry representative for their review, and I was never asked to do so. I felt I had complete intellectual freedom. Schrauzer Aff. ¶¶ 4-6 (5/10/96).

I also understood from the beginning that I had complete freedom to publish or not publish the results of my research. . . . Here again, the decision to publish was entirely my own and I was not influenced by anyone concerning that decision. Schrauzer Aff. ¶ 6 (5/10/96).

109. Numerous scientific publications resulted from CTR Special Products. See Affidavit of Glenn ¶33 & Ex. G; Glenn Cong. Test. at 362-63. There is no evidence in the record that any of these publications contain scientifically invalid methodology or results or deliberately false or misleading information. There is also no evidence in the record of the use of CTR Special Projects to suppress research findings.

1. None of the documents for which defendants claim privilege constitute reports of research conducted as CTR Special Projects, and there is no evidence in the record that the defendants or their counsel have claimed privilege for the results of CTR Special Projects research.

2. 111. CTR Special Projects did not interfere with or otherwise affect CTR's SAB-guided grant-in-aid research or CTR contract research. See Affidavit of Glenn ¶¶ 32, 36; Gertenbach Decl. ¶ 8; *In Camera* and *Ex Parte* Affidavit of Edwin J. Jacob ¶ 98; Affidavit of Holtzman¶¶ 6,9.

3. From about 1971 until 1983, CTR had a Literature Retrieval Division ("LRD"). See Affidavit of Gertenbach ¶ 8 (8/8/86). LRD, like its predecessor, International Information Incorporated (3I"), which was not affiliated with CTR, was a computerized information storage and retrieval system. *In Camera* and *Ex Parte* Affidavit of Edwin J. Jacob ¶ 108 (2/15/97).

4. The principal purpose of LRD was to assist outside litigation counsel for the cigarette manufacturers by coding, analyzing and retrieving publicly available, published medical literature, dealing with medical-legal issues arising in cases brought against the tobacco companies, and for use in preparing to represent their clients in regulatory proceedings and before Congress. Outside litigation counsel specified the materials to be identified, acquired, stored and retrieved, and they directed the manner in which this work was performed. See *In Camera* and *Ex Parte* Affidavit of Edwin J. Jacob ¶ 103.

5. LRD's employees and office facilities were separate from CTR's, and LRD's budget was separate from the budget for CTR's funding of research. See *In Camera* and *Ex Parte* Affidavit of Edwin J. Jacob ¶ 104. CTR administered LRD (including, for example, handling its payroll and employee benefits) from that separate budget. See *In Camera* and *Ex Parte* Affidavit of Edwin J. Jacob ¶¶ 102-104.

6. CTR's administration of LRD did not affect CTR's funding of scientific research. See *In Camera* and *Ex Parte* Affidavit of Edwin J. Jacob ¶¶ 102, 105.

7. In 1983, the functions LRD served were moved to a separate corporation at another location LS, Inc., where it remains to this day. See In Camera and Ex Parte Affidavit of Edwin J. Jacob ¶¶ 104. LS, Inc. and CTR are unrelated. Id.

8. 117. CTR's administration of LRD from 1971 until 1983 as a service to the tobacco companies was not misleading, improper or inconsistent with the 1954 "Frank Statement."

9. Defendants contend that it has long been a matter of common knowledge that there are health risks associated with smoking. Forster v. R.J. Reynolds Tobacco Co., 437 N.W.2d 655 (Minn. 1989) (quoting Roysdon v. R. J. Reynolds Tobacco Co., 623 F.Supp. 1189, 1192 (E.D. Tenn. 1985), aff'd, 849 F.2d 230 (6th Cir. 1988), remanded in part on other grounds); see also Cameron v. American Legion Post 435, 281 N.W.2d 720, 722 (Minn. 1979); Paugh v. R.J. Reynolds Tobacco Co., 834 F.Supp. 228, 231 (N.D. Ohio 1993); Allgood v. R.J. Reynolds Tobacco Co., 80 F.3d 168, 172 (5th Cir. 1996), cert. denied, 117 S. Ct 599 (1996); Lonkowski v. R.J. Reynolds Tobacco Co., No. 96-1192, 1996 WL 888182, at *7 (W.D. La. Dec. 10, 1996); American Tobacco Co. v. Grinnell, No. 94-1227, 1997 WL 33658, at *5-6 (Tex. June 20, 1997); Consumers of Ohio v. Brown & Williamson Tobacco Corp., No. 94-3574, 1995 WL 234620, at *1 (6th Cir. Apr. 19, 1995); Varga v. Brown & Williamson Tobacco Corp., No. G88-568 CA6, 1988 WL 288977, at *3 (W.D. Mich. Nov. 7, 1988); Austin v. State, 48 S.W. 305, 306 (Tenn. 1898), aff'd as modified sub nom., Austin v. Tennessee, 179 U.S. 343 (1900).

10. The Surgeon General issued its first smoking and health report in 1964. The Surgeon General has subsequently issued 22 additional reports on smoking and health which discuss tens of thousands of publications in the smoking and health field.

11. Defendants also contend that Minnesotans and the State of Minnesota itself have long been aware of the risks of smoking. (See Affidavit of Michael E. Parrish, ¶¶ 8 and 9, April 14, 1997 (awareness of Minnesota Legislature), ¶¶ 9 - 11 and 20 - 24 (awareness of Minnesota's education leaders), and ¶¶ 13-

17 (Minnesota newspaper articles) and Berman Expert Report, ¶ 23 ("The State of Minnesota has been aware of the health risks associated with cigarettes and smoking as early as the 1800s . . . Over the last century and a half, the state of Minnesota has claimed leadership in smoking prevention and control.")

12. In their proposed Findings in this case, defendants have asked me to make the following Finding of Fact:

75. The defendants have long publicly acknowledged that smoking has been statistically associated with certain diseases and is a risk factor for those diseases, including lung cancer. (See, e.g., Affidavits of Cathy L. Ellis, Ph.D., ¶ 6, February 12, 1997; Alexander White Spears, III, ¶ 15, February 17, 1997; William Samuel Simmons, Ph.D., ¶ 6, February 12, 1997.) (See also, e.g., LG 0069276 (press release stating that the "public has total awareness that smoking may be a health hazard"); RJR 507703862 (certain "diseases often statistically associated with smoking"); and PM 1005136953.)

The references made by defendants within their proposed Finding do not bear out the use of the phrase "publicly acknowledged."

13. The Ellis Affidavit, ¶ 6, reflects the corporate knowledge of Phillip Morris that there is a statistical association between cigarette smoking and lung cancer and other disease. In the same paragraph of her Affidavit, Dr. Ellis also reports that Phillip Morris denies that a causative link has been established. The Affidavit does not address at all the issue of public acknowledgment or discussion of the statistical association.

14. The Spears Affidavit, ¶ 15, describes Lorillard's position that smoking has been established as a "risk factor for certain diseases." He refers to testimony he has given in litigation to that effect. In the same paragraph, Mr. Spears maintains the Lorillard position that "...it has not been scientifically proven that smoking causes illness in humans."

15. In the Simmons Affidavit, ¶ 6, Dr. Simmons writes, "Although cigarette smoking has been epidemiologically associated with, and therefore is, a risk factor for certain diseases in humans, it has not

been scientifically established that smoking causes diseases in humans. Association does not establish causation."

16. Liggett Doc. 0069276, a press release, reads in relevant part:

The public has total awareness that smoking may be a health hazard," [Kornegay] said. "But they demands facts, not surmises..."

17. RJR Doc. 507703862 reads, in pertinent part:

Despite all the research going on, the simple and unfortunate fact is that scientists do not know the cause or causes of the chronic diseases reported to be associated with smoking. The answers to the many unanswered controversies surrounding smoking - - and the fundamental causes of the diseases often statistically associated with smoking - - we believe can only be determined through much more scientific research.

18. I conclude that defendants' proposed Finding No. 75 is inappropriate. First, the text of the references simply does not support a conclusion that defendants intended to acknowledge that there was a statistical association between smoking and disease except as part of a denial of causation. Second, the public statements, i.e., Liggett Doc. 0069276 and RJR Doc. 507703862 are plainly intended to create doubt as to causation, rather than function as an "admission."

19. The affidavits relied upon in proposed Finding 75 are not public statements at all; rather, they represent the defendants' official position that statistical associations do not necessarily imply causation, and they were prepared for litigation rather than publication. I conclude, therefore, that the defendants' evidence does not reflect a public acknowledgement of a statistical association, nor does the evidence reflect a public consideration of the meaning of the debateable link between such association and causation.

B. STANDARD OF REVIEW

The standard for invoking the crime fraud exception is prima facie.

20. Judge Fitzpatrick found that plaintiffs had made a prima facie showing of crime-fraud with respect to:

- Defendants' assurances that they "would not knowingly distribute a dangerous product" and promises "to solidify such an assurance...." May 9 Order, p. 5.
- Defendants' assurances "that the tobacco industry was committed to providing safe products." Id., p. 5.
- Defendants' "intentionally den[ying] or minimiz[ing] known health risks...." Id., p. 7.
- Defendants' use of attorneys and/or claims of privilege to suppress information and documents "which appear to be scientific in nature and specifically related to health issues." Id., p. 9.
- Defendants' attempts "to create doubt as to a connection between smoking and illness" and "to create doubt that cigarette smoking causes illness." Id., pp. 9, 10.
- Defendants' "safety-related" or "health-related" research...." Id., p. 28.

1. Following the opportunity of the claimant of the privilege to present rebuttal evidence, it is not clear what the standard of review is to be. In Levin v. C.O.M.B. Co., 469 N.W.2d 512 (Minn. App. 1991), Judge Short wrote:

Yet the record before us shows the trial court did not abuse its discretion by implicitly finding Levin failed to make a prima facie case of fraud at the motion hearing. Id. at 469 N.W.2d 515, 516.

Judge Short made this observation in reference to the trial court's consideration of affidavits submitted by the plaintiff and testimony submitted by the defendant. Thus, the trial court was making a final determination as to admissibility, and not a threshold determination whether an in camera inspection should occur. Thus, the C.O.M.B. decision stands for the proposition that if there is still a prima facie case after defendants have been provided an opportunity to rebut the threshold evidence, the privilege is lost.

2. This does not resolve the problem, however. What is the quantum of proof sufficient to rebut? The C.O.M.B. opinion does not address this question. In their supplemental Memorandum of Law of July 29, 1997, Defendants argue that the plaintiffs must carry the burden of proof by a preponderance of

the evidence. I accept this proposition. Laser Indus. v. Reliant Technologies, 167 F.R.D. 417, 438 (N. D. Cal. 1996); The American Tobacco Co. et. al. v. The State of Florida, Case No. 97-1405 at p. 6. (Florida 4th District Court of Appeals, July 23, 1997).

3. In Judge Fitzpatrick's Order of May 9, 1997, he set forth the analytical method to be used in this case:

Assuming that the party asserting the privilege can demonstrate the necessary elements for privilege to attach, the information may yet be discoverable. The privileges are not absolute. “[S]ince the privilege has the effect of withholding relevant information from the fact finder, it applies only where necessary to achieve its purpose.” Haines v. Liggett Group, Inc., 975 F.2d 81, 84 (3rd Cir. 1992) (citing with approval Fisher v. United States, 425 U.S. 391,403 (1976)). In this matter, Plaintiffs argue that the privilege asserted by the Defendants is lost by application of the crime-fraud exception and, therefore, the documents should be made available.

The purpose of the crime-fraud exception to documents otherwise protected by the attorney-client privilege is “to ensure that the ‘seal of secrecy’ between lawyer and client does not extend to communications from the *lawyer* to the client made by the *lawyer* for the purpose of giving advice for the commission of a fraud or crime.” Haines v. Liggett Group, Inc., 975 F.2d 81, 90 (3rd Cir. 1992) (emphasis in the original). “The advice must relate to future illicit conduct by the client . . .” Id. This is exactly what the Plaintiffs argue - that counsel for the tobacco industry advised the industry to conceal documents and research harmful to the industry by depositing the documents with counsel, by routing correspondence through the industry counsel, by naming damning research projects as “special projects” purportedly ordered by counsel, etc., to cover potentially dangerous materials under a blanket of attorney-client privilege protection, and Plaintiffs wish to tear this blanket away. The Court, however, does not determine whether the crime or fraud averred has in fact occurred; it does not opine about the merits of the assertions of crime or fraud. It merely examines known facts to determine whether or not the party seeking disclosure has made a *prima facie* showing of crime or fraud. In re A. H. Robins Co., Inc., 107 F.R.D. 2, 9 (1985). The privilege blanket is torn away if the court finds that the documents in question “bear a close relationship to the client’s existing or future scheme to commit a crime or fraud.” Robins, 107 F.R.D. at 15, citing In Re Murphy, 560 F.2d 326, 338 (8th Cir. 1977).

In considering whether the crime-fraud exception may be applied to the facts of this case, this Court has made several findings relating to statements made by the Defendants to the public. Collectively, these statements could be characterized as assurances by the industry that it would make an honest attempt to learn whether the smoking of cigarettes created health hazards. The Court also concludes that the Defendants had an independent obligation to conduct research into the safety of its product, and to warn the product's consumers if the research results supported negative conclusions. A manufacturer has a special duty, apart from litigation, to keep abreast of the hazards posed by its products. See Jenkins v. Raymark Indus. Inc., 109 F.R.D. 269, 278 (E.D. Tex. 1985), aff'd, 782 F.2d 468 (5th Cir. 1986); see also Minnesota Civil Jury Instruction Guides, No. 117 (“You are instructed that the manufacturer is obligated to keep informed of scientific

knowledge and discoveries in its field") and No. 119 (duty to warn). The cigarette industry itself has recognized this duty. PM 1000335622. Plaintiffs have presented evidence, and the Court has found, however, that the Defendants have claimed that safety-related scientific research conducted by the Defendants has been the subject of claims of attorney-client privilege.

At the same time, it is indisputable that the Defendants have made public statements intended to minimize or reduce fears that smoking is dangerous to one's health. This Court does not believe that Defendants should be permitted to use in its advertising and public relations campaigns, health-related research which supports their economic interests, and to claim privilege for research which may lead to the opposite conclusion. See Laughlin v. A.H. Robins, Minn. Dist. Ct. No. 776-868 (March 21, 1984). If the Defendants had an obligation to disclose the hazards of tobacco products, and this Court concludes that they did, their obligation to disclose cannot be eliminated by the assertion of attorney-client privilege.

A two-part test is necessary in determining whether the crime-fraud exception applies to the privileged material.

First, there must be a prima facie showing that the client was engaged in criminal or fraudulent conduct when he sought the advice of counsel, that he was planning such conduct when he sought the advice of counsel, or that he committed a crime or fraud subsequent to receiving the benefit of counsel's advice. Second, there must be a showing that the attorney's assistance was obtained in furtherance of the criminal or fraudulent activity or was closely related to it.

Haines v. Liggett Group, Inc., 140 F.R.D. 681 (D.N.J. 1992) (citing In re Grand Jury Investigation, 842 F.2d 1223, 1226 (11th Cir. 1987)(citations omitted)), order vacated on other grounds, 975 F.2d 81 (3rd Cir. 1992).

The burden of establishing that the crime-fraud exception should apply now falls on the Plaintiffs. The Plaintiffs "bear[] the burden of presenting a *prima facie* case that the crime-fraud exception applies. Levin v. C.O.M.B. Co., 469 N.W. 2D 512, 515 (Minn. Ct. App. 1991). Just what constitutes a *prima facie* case has been expressed by the courts in different words, yet the evidentiary standard is fundamentally the same. The Supreme Court used these words: "To drive the privilege away, there must be 'something to give colour to the charge;' there must be '*prima facie* evidence that it has some foundation in fact.' When the evidence is supplied, the seal of secrecy is broken." Clark v. United States, 289 U.S. 1, 14-15 (1933) (citations and footnote omitted). The Second Circuit phrased it a little differently: "[The tests] require that a prudent person have a reasonable basis to suspect the perpetration or attempted perpetration of a crime or fraud, and that the communications were in furtherance thereof." In re Grand Jury Subpoena Duces Tecum, 731 F.2d 1032, 1039 (2d Cir. 1984).

The evidentiary burden is lessened when disclosure is initially made only to the Court or Special Master for an *in camera* review, because such an inspection is a lesser intrusion into the attorney-client communications than full public disclosure. United States v. Zolin, 491 U.S. 554, 572 (1989).

Before engaging in *in camera* review to determine the applicability of the crime-fraud exception, "the judge should require a showing of a factual basis adequate to support a

good faith belief by a reasonable person,” Caldwell v. District Court, 644 P.2d 26, 33 (Colo. 1982), that *in camera* review of the materials may reveal evidence to establish the claim that the crime-fraud exception applies.

Once that showing is made, the decision whether to engage in *in camera* review rests in the sound discretion of the district court. Id.

Thus, the Court or Special Master may examine the submission of the Plaintiffs and decide whether there is enough factual evidence “to support a good faith belief by a reasonable person that the materials may reveal evidence of a crime or fraud.” Haines v. Liggett Group Inc., 975 F.2d 81, 96 (3rd cir. 1992). This is only a preliminary step, however. It can result, at best, in an *in camera* review of the challenged document. To determine whether or not the exception applies, the Defendants must “be given an opportunity to be heard, by evidence and argument, at the hearing seeking an exception to the privilege.” Id. at 97. This evidentiary hearing must provide due process, i.e. “notice and an opportunity to be heard at a meaningful time and in a meaningful manner.” In re A.H. Robins Co., Inc., 107 F.R.D. 2, 6 (1985) (citing In Goldberg v. Kelly, 397 U.S. 254, 267 (1970)). The fact finder then will apply the crime-fraud exception only when it “determines that the client communication or attorney work-product in question was *itself* in furtherance of the crime or fraud.” In re Richard Roe, 68 F.3d 38, 40 (2nd Cir. 1995).

The court has the discretion whether or not to engage in an *in camera* review and the extent of that *in camera* review.

[T] decision whether to engage in *in camera* review [should] rest[] in the sound discretion of the [trial] court. The court should make that decision in light of the facts and circumstances of the particular case, including, among other things, the volume of materials the [] court has been asked to review, the relative importance to the case of the alleged privileged information, and the likelihood that the evidence produced through *in camera* review, together with other available evidence then before the court, will establish that the crime-fraud exception does apply.

United States v. Zolin, 491 U.S. 554,572 (1989). It follows, then, that the court must exercise its discretion in light of the factors set forth in Zolin to create a process that balances the need for judicial efficiency with the parties’ due process rights. The process set forth herein, infra, has been designed to do just that.

1. In their submissions, defendants have urged that I accept a common law definition of "fraud" and require a demonstration by the defendants that each of the elements of common law fraud have been demonstrated and not rebutted. I decline to do so. First, such a requirement would be inconsistent with Judge Fitzpatrick's Order of May 9, 1997. Second, the particular facts and allegations of this case cause

me to believe that the issue of "fraud" rests at least in part in Minn. Stat. § 325F.69 which makes it unlawful, at subd. 1 to use "...any fraud, false pretense, false promise, misrepresentation, misleading statement or deception practice, with the intent that others rely thereon in connection with the sale of any merchandise, whether or not any person has, in fact, been misled, deceived or damaged thereby..." Thus, the element of actual reliance is eliminated by statute.

2. Additionally, Levin v. C.O.M.B., Co., 469 N.W.2d 512, 515 (Minn. App. 1991) does not, to my reading, specify that all elements of common law fraud be demonstrated. Rather, the opinion observes that application of the crime-fraud exception should not be based on a rigid analysis. Instead, the focus should be on whether the detriment to justice from foreclosing inquiry into pertinent facts is outweighed by the benefits to justice from a franker disclosure in the lawyer's office. Id. at 469 N.W.2d 515.

3. The defendants in this case, whether through a voluntary undertaking embodied by the Frank Statement, or whether by operation of law, were obliged to conduct research into the safety of their products and to warn the product's consumers if the research supported negative conclusions. See Fitzpatrick Order dated May 9, 1997.

4. Accordingly, my inquiry in this case is this:

Am I satisfied by a preponderance of the evidence offered by both plaintiffs and defendants that the defendants were engaged in criminal or fraudulent conduct?

Included within "criminal or fraudulent conduct" are a failure to conduct appropriate research into the safety of their products and a failure to warn their products' consumers if the research supported negative conclusions.

Second, has it been demonstrated by a preponderance of the evidence that the involvement of defendants' attorneys was in furtherance of the conduct or was closely related to it?

Discussion of the Evidence

1. In support of their allegations of crime fraud, plaintiffs have argued that the projects sponsored by the Scientific Advisory Board of CTR were not related to the alleged relationship between

smoking and lung cancer. In support of such arguments, plaintiffs point to comments made by scientists and researchers associated with the industry. (See plaintiffs' proposed Findings of Fact 13-22). In response to this, defendants have offered affidavits from other scientists and researchers, which affidavits defend the integrity of the SAB projects and which attempt to demonstrate the context of the statements to which plaintiffs point.

2. The defendants' responses to the evidence produced by plaintiffs regarding the SAB were voluminous. Affidavits from employees, researchers and attorneys describing the operation of the SAB rebut, in my opinion, an inference that the grant-making process of the Board was guided by an intention to provide cover for the tobacco industry, or that the grant-making process was subverted to result in false or irrelevant research.

3. The question remains, however, whether the defendants in any fashion did fulfill their legal obligation to conduct appropriate research into the safety of their products. It is not possible for the Special Master to conduct a scientific evaluation of the research which the SAB did sponsor. The Affidavit of Emanuel Rubin dated February 10, 1997 (Item 24, Appendix B to defendants' joint Memorandum) is a defense of the SAB research product. He writes, at paragraph 14 of that Affidavit:

I am particularly disturbed by plaintiff's [the State of Florida] attacks on the basic scientific research funded by CTR. In the early years, CTR's program was oriented toward directed research, such as studies involving cigarette smoke, condensate, smoke components and similar compounds. Even then, however, basic scientific research was an essential component of CTR's research program. As time passed, basic research assumed a greater and greater role, to the point that it now represents virtually all of the current research activity supported by CTR. This has been described by plaintiff's experts as further evidence of a scientific fraud. They are entirely wrong. I would be critical of the program if it had not undergone this transformation.

Whether the research funded by SAB under the auspices of CTR is sufficient to discharge the defendant's individual responsibilities under the law will be a factual question litigated in the case in chief. It is not susceptible of an answer in these proceedings.

4. There was no evidence presented in these hearings that the defendant companies conducted significant independent research, i.e., that which was not jointly sponsored through CTR. Plaintiffs argue that this is the result of a "gentleman's agreement." Plaintiff's Proposed Findings 23-26. I find it improbable that it is simply a coincidence that the individual defendants did not conduct such research.

5. In his in camera and ex parte affidavit, Edwin Jacob, long-time counsel for CTR writes:

The decision to fund research created the related questions of whether that research should be performed internally or by outside researchers and, if the research was to be performed by outside researchers, whether the companies should direct the research or have it directed by others. The companies concluded that internal research or research conducted by outside researchers under industry contracts would not be given proper credit if, as they expected, it supported their belief regarding causation. Conversely, if the results were equivocal, the parts suggesting causal possibilities would be exaggerated. Further, the companies were concerned that, if the companies conducted research only internally, some would claim that they were pursuing the research half-heartedly, pursuing it improperly, or suppressing the results. Accordingly, the companies determined that the most effective and efficient way for the companies to conduct this research was to fund outside researchers selected by a board of eminent, independent scientists.

6. With respect to the CTR special projects, I conclude that they functioned entirely under the direction of the Committee of Counsel, i.e., the attorneys of the defendant companies and organizations, or their representatives. In reaching this conclusion, which is essentially admitted by the defendants, I note that the projects were selected for funding by the attorneys on the basis of utility in litigation, congressional testimony, administrative proceedings and for public relations purposes.³ There is no evidence before me which would cause me to conclude that the CTR special projects were intended to provide research product which might be unfavorable to the tobacco industry. Rather, the projects were selected for their favorable prospects.

³See discussion of the Liggett Category 1 documents below.

7. I also conclude that the contemporaneous corporate knowledge of the defendants as to the safety of their products is an appropriate area of inquiry and discovery in a case such as this. This inquiry should not be defeated because the research function was controlled by attorneys.

8. Many of the researchers who worked on CTR special projects published their research. Although these researchers were informed that their publications should bear an acknowledgment that the research was a "Special Project of the Counsel for Tobacco Research," it is unlikely, in my opinion, that any reader other than an industry insider would understand that the research was not, in fact, sponsored by the Scientific Advisory Board. This would result in confusion and a perception that the favorable research was sponsored by the supposedly neutral SAB.

9. It is my conclusion, therefore, that with the exception of that research funded by the Scientific Advisory Board, industry research was effectively controlled by the Committee of Counsel. It is my further conclusion that the research directed by the attorneys was not intended to be independent; rather, it was intended to be used in opposition to unfavorable research, whether in litigation, legislation, administrative forums, or public relations.

10. I also conclude that this attorney-directed control of an industry's research does, in fact, fall within the confines of the crime-fraud exception to the attorney-client privilege. The failure on the part of defendants individually to investigate the safety of their product, coupled with their ongoing assurances that causation of illness was unproved and speculative, necessarily implicates the holding of Levin v. C.O.M.B. Co., 469 N.W.2d 512, 515 (Minn. App. 1991) which poses this test: Is the detriment to justice from foreclosing inquiry into pertinent facts outweighed by the benefits to justice from a franker disclosure in the lawyer's office?

11. On the facts of this case, I conclude that the answer to the question posed within the C.O.M.B. decision is that further inquiry must be permitted. I conclude that plaintiffs in this case must be permitted to inspect the documents which reveal the control exerted by the tobacco industry attorneys over the research conducted by that industry. If the research conducted by the industry as a whole through the Scientific Advisory Board has been sufficient to satisfy the industry's obligations, and consequently the individual defendant's obligations, that is a decision which must be made within the case in chief.

E. PRIVILEGE STATUS OF DOCUMENTS IN CATEGORIES 1-12.

(1) Category 1 - Other Litigation.

The Special Master has reviewed all of the Liggett documents in Category 1. These documents, for the most part, are communications among the attorneys representing the tobacco industry. Many of these documents are transmittal letters. There are hand-written minutes of the meetings of the Committee of Counsel, i.e., those persons serving as General Counsel of the defendant companies, which meetings were also attended by other attorneys for the tobacco industry. The correspondence among these attorneys routinely considered pending and proposed CTR special projects and their relative utility, or lack thereof.

To the extent that these documents reflect attorneys selecting and directing research projects, and to the extent that the documents represent information as to the "corporate knowledge" of the defendants at relevant times, I am of the opinion that the documents should not be privileged in the first place. If corporate research directors had selected and directed research on safety issues, the documents generated during the decision making process would have been discoverable.

The minutes of the Committee of Counsel also reflect discussion, on a routine basis, of legal concerns of those attending the meeting, including appearances before regulatory agencies, reactions to congressional initiatives, and progress of litigation occurring around the United States.

Several of the documents within Category 1 provide insight into the relationships between the tobacco companies and CTR, between CTR and its SAB, and among the several companies.

These documents are subject to the crime-fraud exception because they demonstrate the actual involvement of the attorneys for the defendant companies in the selection, funding, and funding continuation for CTR special projects, and because these documents provide relevant evidence of the response by the defendants to allegations from external sources to the effect that the defendant's products were unsafe.

It is recognized that substantial portions of the documents within Category 1 are not relevant to the questions of research, knowledge and response. Because of the necessity of dealing with these documents by category, it is recommended that each document be individually considered for relevancy and be subjected to possible redaction prior to its being received as evidence in the case in chief.

(2) Category 2 - No Attorney Identified.

There were a total of 122 documents within Category 2. The following documents were individually read:

2017135-2017141
2018297-2018354
2007802-2007807
2023384-2023386
2024343-2024344
2024349-2024363

None of the sampled documents within Category 2 relate to involvement by attorneys in the selection or direction of research to be done, or in the involvement by attorneys in responding to an obligation to inform the public regarding the safety of the defendant's products. The documents within this category which were reviewed, although they do not identify an attorney as the author or recipient, are primarily legal in nature, and it is a reasonable inference that they constitute legal advice or legal work product.

For the foregoing reasons, I conclude that the claim to privilege to the documents in Category 2 should be sustained.

(3) Category 3 - Science.

There were 187 documents within Category 3 of the Liggett documents. The following documents were individually reviewed:

2005756-2005756	2022193-2022193
2005757-2005757	0308468-0308468
2005771-2005772	2006311-2006312
2005788-2005788	2023519-2023528
2022191-2022191	

Of the documents randomly selected for review from Category 3, six were transmittal letters from the research bureau of the Liggett company to the General Counsel's office within that company. The communications transmit scientific information not included with the cover letter.

The seventh document, 0308468, could not be located within the Liggett documents.

Document 2006311 through 2006312 is a communication from Hill and Knowlton, a public relations firm, to the General Counsel Group for the defendant tobacco companies, including Frederick Haas, General Counsel for Liggett. The document, dated August 21, 1964, discusses the preparation of a pamphlet which would summarize medical and scientific evidence, which pamphlet would be aimed at opinion leaders, the business community and the general public.

The final document, 2023519 through 2023528 is a memorandum to file from "FKD" dated April 28, 1967, representing the author's summary of an April 27, 1967 meeting with the "literature committee" on the subject of the 3i computer project.

The sample of documents reviewed from Category 3, and by extension, the entirety of Category 3, is not subject to the attorney-client privilege. They do not demonstrate a process of a client seeking advice or an attorney providing advice. On the contrary, the letters from the Research Bureau of Liggett

transmitting research or scientific information to Liggett's general counsel, reflect the involvement of the Liggett attorneys in the monitoring of that company's research function.

I conclude that the attorney-client privilege claim for the Category 3 documents should not be sustained on the basis that the documents were not privileged at the outset, and on the basis of the crime-fraud exception.

It is recognized that substantial portions of the documents within Category 3 are not relevant to the questions of research, knowledge and response. Because of the necessity of dealing with these documents by category, it is recommended that each document be individually considered for relevancy and be subjected to possible redaction prior to its being received as evidence in the case in chief.

(4) Category 4a - Communications of Counsel (Attorney-Client).

The following sample of documents was reviewed from Category 4a:

2004135-2004144	2010999-2011001
2005872-2005879	2011964-2011968
2008877-2008877	2012481-2012483
2009297-2009299	2015164-2015167
2019215-2019215	2015289-2015294
2000025-2000025	2015295-2015295
2000569-2000573	2015328-2015336
2001140-2001146	2015344-2015350
2004850-2004851	2017206-2017208
2005309-2005317	2017574-2017581
2005508-2005508	2017613-2017620
2005511-2005513	2017992-2017996
2006089-2006093	2019085-2019086
2006336-2006337	2019509-2019511
2008875-2008876	2021763-2021768
2008960-2008965	2022154-2022154
2009381-2009382	2022725-2022728
2009753-2009763	2023066-2023066
2009880-2009888	2023076-2023079
2010866-2010869	2024143-2024144
2010998-2010998	2024421-2024425

The sample of the documents within Category 4a consisted of 42 documents. Many of the documents consisted of hand-written notes of meetings of the Committee of Counsel. The documents also included communications between counsel on pending legal issues. On the basis of the sample reviewed, I conclude that the documents represent communications among lawyers as part of a joint defense in response to existing litigation, regulatory action, etc. I do not conclude that this sample of documents represents additional evidence supporting an inference of crime-fraud. The claim of privilege with respect to the documents in 4a should be sustained.

(5) Category 4b - Special Projects.

The following documents from Category 4b were examined:

2000634-2000634	2002643-2002643
2000476-2000482	2002683-2002683
2000483-2000483	2002734-2002735
2000488-2000488	2002743-2002744
2000578-2000579	2010694-2010694
2000751-2000752	2010957-2010960
2000849-2000849	2011407-2011408
2000850-2000860	2011969-2011975
2001036-2001044	2015251-2015256
2001122-2001128	2018841-2018842
2002495-2002495	2021550-2021550
2002502-2002503	2022016-2022016
2002568-2002570	2023844-2023848
2002642-2002642	

The great majority of these documents are transmittal letters or reports recommending the funding of research as a special project.

Because of my determination that the crime-fraud exception applies with respect to the attorneys' direction of research, I conclude that the documents in Category 4b, if they are attorney-client privileged at all, are subject to the crime-fraud exception.

It is recognized that substantial portions of the documents within Category 4b are not relevant to the questions of research, knowledge and response. Because of the necessity of dealing with these documents by category, it is recommended that each document be individually considered for relevancy and be subjected to possible redaction prior to its being received as evidence in the case in chief.

(6) Category 4c - LS, Inc.

The documents reviewed in this category are:

2023450-2023450	2011159-2011160
2005757-2005757	2011167-2011167
2005758-2005758	2011197-2011200
2005807-2005809	2011500-2011500
2020797-2020800	2017191-2017191
2020877-2020883	2018918-2018921
2022198-2022198	2019203-2019206
2001008-2001009	2020707-2020747
2004363-2004365	2024224-2024232

The 3i project essentially represents the industry-wide consolidation indexing, storage and retrieval of information relating to smoking and health.

The sample of documents examined from Category 4c, in summary, represents communications to and/or from lawyers on the subject of fact work product.

The sample does not disclose communications regarding the selection, direction or funding of research, nor does the sample reflect attorney involvement in a defendant's decision to advise the public on safety issues. The privilege claim should be sustained.

(7) Category 5 - Public Statements.

Documents within this category which were examined are:

2000124-2000127
2006112-2006113
2008841-2008844
2017997-2018001

The documents within the sample do not, on their face, disclose that they are attorney-client privileged. Document 2000124 is apparently a draft of a letter by Liggett declining to join the Tobacco Industry Research Committee, now known as CRT. Assuming this document was generated by Liggett, one could also conclude that it is not subject to the joint defense privilege.

Document 2006112 is a letter from General Counsel of Brown & Williamson to the General Counsel Group dated November 23, 1977. The letter recommends a public relations response to a statement made by a Dr. Borne.

Document 2008841 is an unidentifiable (by author or date) document disagreeing with the use of the word "addiction" in association with cigarette smoking.

Document 2017997 is, essentially, a scientific argument to the effect that carbon monoxide and cigarette smoke are not responsible for the development of cardiovascular disease.

I conclude that the sample of the documents within Category 5 are not attorney-client privileged. They do not represent communications made or received as part of the process of seeking or providing legal advice. I conclude, therefore, that the claim of privilege with respect to the documents in Category 5 should not be sustained.

(8) Category 6 - Additives.

The following sample of documents within Category 6 was examined:

2005671-2005674	2015212-2015213
2019470-2019470	2015235-2015240
2000580-2000580	2017211-2017212
2000690-2000691	2017612-2017612
2002855-2002868	2019085-2018086
2003587-2003595	2022168-2022169
2005351-2005382	2022384-2022389
2010961-2010962	

The documents examined reflect communications to and/or from attorneys on the subject of additives in cigarettes. The documents collectively reflect the involvement by attorneys in responses to

regulatory initiatives which relate to cigarette components. For example, 2005352 is a draft of a response to an FDA recommendation that cigarette filters be classified as Class 2 Devices.

Document 2017211-2017212 is correspondence to the Committee of Counsel from the law firm of Covington & Burling on the subject of congressional hearings on Chemosol.

The documents within the sample considered represent a response by attorneys to federal initiatives relating to additives in cigarettes. I conclude that the claim of attorney-client privilege for the documents in Category 6 should be sustained.

(9) Category 7 - Children.

The documents reviewed from Category 7 are:

2016954-2016986

2024088-2024105

2024046-2024059

Document 2016954-2016986 is an unsigned and undated paper, apparently commenting on proposed state legislation which would, if adopted, regulate many aspects of the cigarette business, including sales to minors, advertising, etc.

Document 2024088-2024105 was written by an attorney at Covington & Burling and sent to an attorney within Liggett's General Counsel office. The document simply transmits without comment proposed California legislation.

Document 2024046-2024059 is correspondence from an attorney at Covington & Burling to an attorney at Liggett's General Counsel office transmitting amendments to state legislation.

Based upon the sample of Category 7 reviewed, I do not see any indication that the communications were subject to the attorney-client privilege, and I conclude that the privilege claim with respect to Category 7 documents should not be sustained.

(10) Category 8 - Advertisements.

The documents within Category 8 are:

2004007-2004012	2012263-2012263
2004068-2004069	2012276-2012279
2004131-2004133	2012315-2012326
2004156-2004159	2012416-2012427
2004733-2004733	2015164-2015167
2004891-2004891	2015296-2015299
2006366-2006366	2016949-2016953
2012545-2012554	2017443-2017443
2017284-2017284	2017482-2017487
2023015-2023018	2017853-2017877
2023320-2023320	2019186-2019188
2000763-2000766	2019569-2019573
2005385-2005389	2020518-2020526
2005644-2005645	2021329-2021335
2006305-2006305	2021763-2021768
2006308-2006309	2022023-2022025
2006313-2006313	2022319-2022320
2007539-2007540	2022489-2022497
2007597-2007597	2022691-2022692
2008142-2008150	2022971-2022971
2010772-2010773	2023075-2023079
2010803-2010806	2023080-2023093
2011843-2011850	2023289-2023303
2012240-2012240	

The documents within Category 8 relate almost exclusively to the industry's response to initiatives by the Federal Trade Commission to create an advertising code and to require disclosures and/or warnings within that advertising. The documents represent the response of the industry lawyers to that FTC initiative.

I conclude that the sample of documents within Category 8 fairly falls within the attorney-client and joint defense privileges. The attorneys for the industry were responding to regulatory initiatives which affected the entire industry.

(11) Category 9 - Discovery

The documents sampled within Category 9 are:

2000025-2000025
2000062-2000063
2017289-2017294

Document 2000025 was not found within the Liggett documents. Document 2000062-2000063 is a memorandum from Joseph Greer, attorney at Liggett, to an executive at the company, describing the status of a response to a discovery request by the Federal Trade Commission. Document 2017289 through 2017294 is a typed memorandum representing the minutes of the Committee of Counsel dated March 14, 1969. Among other subjects considered within the minutes is a response to a request from the FTC for data.

I conclude that the two documents sampled represent attorneys' consideration of appropriate responses to discovery requests, or requests for information from regulatory agencies. I conclude that the documents are subject to the attorney-client and joint defense privileges.

(12) Category 10 - Government Regulations.

The documents sampled within Category 10 are:

0310737-0310745	2012106-2012106
2004042-2004051	2012524-2012524
2004088-2004088	2022043-2022044
2004156-2004159	2019289-2019354
2004480-2004481	2023559-2023559
2005613-2005614	2000062-2000063
2006720-2006779	2000562-2000566
2008306-2008307	2000780-2000783
2009300-2009303	2001255-2001257
2010936-2010938	2002373-2002383

2004495-2004510	2018754-2018761
2005583-2005612	2019157-2019157
2005629-2005629	2021444-2021479
2006273-2006273	2021729-2021733
2006295-2006295	2021850-2021850
2006305-2006305	2022538-2022542
2006365-2006365	2022816-2022816
2007541-2007546	2022817-2022818
2007552-2007557	2023470-2023470
2008190-2008197	2024349-2024363
2008230-2008232	2024364-2024364
2009096-2009097	2024577-2024580
2009291-2009296	
2009628-2009628	
2010102-2010109	
2010110-2010121	
2010803-2010806	
2010823-2010823	
2011132-2011141	
2011589-2011589	
2011619-2011623	
2011708-2011708	
2011996-2012003	
2012122-2012138	
2012313-2012313	
2012336-2012346	
2012734-2012760	
2015135-2015136	
2015158-2015160	
2015221-2015225	
2016561-2016562	
2017142-2017169	
2017219-2017224	
2017234-2017245	
2017512-2017529	
2017654-2017736	
2017893-2017893	

The sample of documents from Category 10 represents responses by the attorneys for the industry to regulatory activity by the government. Many of the documents are minutes of the committee of counsel in which responses to the regulatory efforts are considered. Other documents reflect attorneys' involvement in "position papers." e.g. 2001255-2001257.

In the aggregate, the documents reflect attorney involvement in responding to regulatory activity. I conclude that they are attorney-client and joint defense privileged.

(13) Category 11 - Patents/EPA.

The documents within Category 11 which were sampled are:

2000892-2000908	2005580-2005582
2018769-2018770	2005583-2005612

The sample documents are minutes or documents relating to the Committee of Counsel and relate at least marginally to the Environmental Protection Agency. There is nothing within them which reflects attorney direction of research. I conclude that they are attorney-client and joint defense privileged.

(14) Category 12 - Other Documents.

Category 12 documents reviewed are:

2000095-2000099	2000101-2000101
2022027-2022027	2010148-2010148

The sample of Category 12 documents reviewed consisted of four documents. Each of the documents reviewed was a communication to and/or from an attorney. The documents reviewed are unremarkable, and they pertain to matters of attorney-client communications. I conclude that they are attorney-client and joint defense privileged.

Dated: September 10, 1997

/s/ _____
Mark W. Gehan
Special Master